CLAIMS

1. A compressed gas operated pistol of the type consisting a support casing (26), which defines:

A barrel zone (1), in which a barrel (2) is arranged with a rear end (2a) facing a chamber (3);

A trigger zone (4) containing a trigger (5) connected to a hammer operating mechanism (6); and

A stock zone (7) containing an ammunition magazine (8) arranged to insert and retain a pellet (9a) in said chamber (3) prior to each shot, and a pressurised gas cylinder (10) communicating with a valve chamber (11), which in turn, communicates with said chamber (3) by means of a valve element (12) pushed by elastic means towards a closed position and which can be moved instantly to an open position by the impact of said hammer (6).

characterised in that said barrel (2) can move, linearly guided to perform a rocking movement in an axial direction and which is linked to said trigger (5), being arranged elastic element (51) for pushing the trigger (5) and barrel (2) assembly forwards to a resting position, with said connection being such that when the trigger (5) is pressed against the force of said elastic element (51), the trigger (5) moves the barrel (2) backwards activating a sealing element (2b, 2c) to isolate the chamber (3) with respect to the ammunition magazine (8).

2. A pistol, in accordance with claim 1, characterised in that said sealing element (2b, 2c) consists of a thin cylindrical wall (2b) arranged in said rear end (2a) of the barrel (2), defining an interior surface which is a continuation of the barrel bore surface, an exterior surface that can be adjusted to an interior surface of the chamber (3) and a final perimeter edge (2c), with said thin cylindrical wall (2b) arranged so that when the barrel is moved backwards by the trigger (5), the thin cylindrical wall (2b) get into the chamber (3) and collects said pellet (9a) which

is inside the chamber (3) until said final perimeter edge (2c) is supported against a rear surface (24) of the chamber (3) around a compressed gas inlet (25), and said exterior surface prevents the gas from passing to an opening (8a) of said ammunition magazine (8) on said interior surface of the chamber (3), being foreseen means of release (22) provided for freeing the pellet (9a) in the chamber (3) simultaneously with the penetration of the sealing element (2b, 2c) on the same.

3. A pistol, in accordance with claim 2, characterised in that said ammunition magazine (8) consists of a ammunition store (19) for a column of several pellets (9) communicating with said chamber (3) via said opening (8a) and an ammunition push mechanism (20) operated by a spring (21) and arranged to push said column of pellets (9) towards the chamber (3), consisting of said means of release (22), a trap (22) articulated with respect to a shaft (23) and arranged in said opening (8a) between said ammunition store (19) and the chamber (3) so that it is pushed upwards by the penultimate pellet (9b) in the column and so that, when the thin cylindrical wall (2b) of the rear end (2a) of the barrel (2) get into the chamber (3), the final perimeter edge (2c) pushes said trap (22) downwards and which drags the penultimate pellet (9b) and with the rest of the column against the force of said spring (21) of the ammunition push mechanism (20).

4. A pistol, in accordance with claim 1, characterised in that the upper section of said barrel zone (1) also comprises a sliding cover (13) linearly guided in order to perform a rocker movement in a direction parallel to the barrel (2) axis, with the rear end of said sliding cover (13) including a connection (14, 16) with said hammer (6) and with the sliding cover (13) connected to said trigger (5) so that when pressed, the sliding cover (13) moves backwards, thus performing the action of loading and firing the hammer (6) in virtue of said connection (14, 16)

in synchronisation with said backwards movement of the barrel (2).

5 A pistol, in accordance with claim 4, characterised in that said connection (14, 16) of the rear end of the sliding cover (13) with the hammer (6) consists of a pawl (14) articulated by a pin (52) loaded by a spring (15) arranged at the rear end of the sliding cover (13) to be coupled to a protuberance (16) on said hammer (6), which is mounted so that it can pivot with respect to an shaft (17) and loaded by a spring (18) so that when the sliding cover (13) is linearly moved backwards, said pawl (14) is coupled to said protuberance (16) causing the hammer (6) to pivot backwards against the force of said spring (18) until, in virtue of the curved path of the protuberance (16), this escapes from the pawl (14) and the spring (18) pushed the hammer (6) producing said impact on said valve element (12).

6. A pistol, in accordance with claim 5, characterised in that it consists of an automatic safety catch (39) connected to the trigger (5) so that said catch (39) interferes with a stop (41) fixed inside the sliding cover (13) when the trigger (5) is in said resting position, preventing any movement of the sliding cover (13) independently of the trigger (5) movement, and is separated from the path of said stop (41) by the trigger (5) when it is pressed, permitting movement of the sliding cover (13) by the trigger (5).

7. A pistol, in accordance with claim 6, characterised in that said automatic safety catch (39) is connected to an arm (40) mounted on the casing (26) or a part fixed to the same, so that it can pivot with respect to a shaft (53), with said arm (40) incorporating a linear guide (54) along which slides a snug (55) connected to the trigger (5), so that a backwards movement of the trigger (5) causes a downwards movement of the automatic safety catch (39).

8. A pistol, in accordance with claim 4, characterised in that it consists of a compression helicoidal spring (48) arranged

around the barrel (2) and compressed between a front interior end (13a) of the sliding cover (13) and a surface of the support casing (26) or of a body connected to the same to push the sliding cover (13) forwards to a resting position.

9. A pistol, in accordance with claim 4, characterised in that said trigger (5) is an integral part of a trigger piece (5a) mounted in said trigger zone (4) so that it can slide linearly guided in a direction parallel to the barrel (2) axis, where the trigger piece (5a) consists of drag snugs (44), which extend laterally from the same and which interfere with internal stops (45) on the sliding cover (13) in order to drag the same along, and a cavity (46) into which is inserted a catch (47), firmly connected to the barrel (2) in order to drag the same.

10. A pistol, in accordance with claim 9, characterised in that there is free play between said catch (47) and contact walls of said cavity (46) to allow a delay in the start of the barrel (2) movement with respect to the start of the trigger (5) movement and of the sliding cover (13) and to guarantee a smaller movement of the barrel (2), both when the trigger is pressed as when released.

11. A pistol, in accordance with claim 1, characterised in that it consists of a voluntary safety element (42) mounted on an upper exterior section in the stock zone (7) so that it can voluntarily pivoted between a locked position, where a tooth (42a) of said voluntary safety element (42) fits into a recess (43) on said sliding cover (13) and a free position, in which said tooth (42a) is outside of said recess (43).

12. A pistol, in accordance with claim 1, characterised in that said support casing (26) in the stock zone (7) is hollow and open at the lower end to receive a casing (27) which includes said ammunition magazine (8), together with said chamber (3); a cavity (28) for housing said compressed gas cylinder (10) with a perforation needle (50) to perforate a gas outlet in the

pressurised gas cylinder (10); a valve body (29) which defines said valve chamber (11) which contains said valve element (12); and a sliding protector (30) configured and arranged to cover one end of the operation (12a) of the valve element (12) when said casing (27) is removed from the stock zone (7).

13. A pistol, in accordance with claim 12, characterised in that said sliding protector (30) is pushed by a spring (31) towards a protection position, with a stop (32) inside the stock zone (7) in order to make contact with the sliding protector (30) and to hold it in a retired position against the force of said spring (31) when the casing (27) is installed in the stock zone (7), with a retainer (33) arranged in the support casing (26) so that it can be operated from the outside to retain the casing (27) in the stock zone (7) against the force of the spring (31), with the sliding protector (30) acting as an ejection mechanism in virtue of the force of the spring (31) when said retainer (33) is freed in order to extract the casing (27).

14. A pistol, in accordance with claim 13, characterised in that the casing (27) consists of a lower cover (34) articulated with respect to a shaft (36) and fitted with a elastic lock catch (37), including said cover including an interior cavity for housing and protecting, in a closed position, a lock wing nut (38) for the compressed gas cylinder (10).

15 A pistol, in accordance with claim 14, characterised in that said lower cover (34) defines an exterior surface which extends and finishes the lower exterior surface of said hollow casing (26) in the stock zone (7), when the casing (27) is installed within the stock zone (7).

16. A pistol, in accordance with claim 1, characterised in that said casing (26) consists of longitudinal channels (65), on both sides of a lower section of said barrel zone (1), adapted for the attachment of various accessories.